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09/806,960	07/07/2001	Dixon Hong	B-4154PCT618	2253

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EXAMINER
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PEREZ DAPLE, AARON C

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/806,960

**Applicant(s)**

HONG, DIXON

**Examiner**

Aaron C Perez-Daple

**Art Unit**

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Action is in response to Amendment filed 9/7/04, which has been fully considered.
2. Claims 1-18 are presented for consideration.
3. This Action is FINAL.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. **Claims 1, 9, 10 and 18** are rejected under 35 U.S.C. 102(a) as being anticipated by Ho et al. (US 5,805,298) (hereinafter Ho).
6. **Examiner's Note:** The rejection of claims 9 and 18 under 35 U.S.C. 102(a) does not constitute a new basis of rejection because these limitations were previously rejected as taught by Ho, as explicitly stated on page 9 of non-Final rejection mailed 6/4/04.
7. As for claim 1, Ho discloses a method of retrieving electronic mail for a user at a location remote from a server to which the user belongs but which the user is unable to specify, including the steps of:  
  
providing an access database (DNS database) containing records of servers supporting a specified electronic mail protocol or protocols (col. 8, lines 7-17); requiring from the user the electronic mail address and log-in password of the user (col. 7, line 63 – col. 8, line 17); parsing the mail address to identify and remove the user identifier from the mail address and

thereby obtain a presumed domain name of the user's server (inherent to DNS look-up in order to locate the email server; col. 8, lines 7-17); interrogating the access database to determine whether it contains a record of a server corresponding to the presumed domain name (inherent to DNS look-up in order to locate the email server; col. 8, lines 7-17); retrieving the record of any corresponding server thus identified as the server to which the user belongs (inherent to DNS look-up in order to locate the email server); retrieving the user's electronic mail from a server identified as the user's server (col. 8, lines 18-22); and directing the mail to the user at the remote location (col. 8, lines 38-50).

For support of the inherency of parsing the email address to obtain a presumed domain name, interrogating the access database using the presumed domain name, and retrieving a record of the server as inherent to a DNS look-up, Applicant is referred to previously cited Stevens, pgs. 187-200. See also the Response to Arguments section below.

8. As for claim 10, Ho discloses a system for retrieving electronic mail from a user at a location remote from a server to which the user belongs but which the user is unable to specify, including:

an access database (DNS database) containing records of servers supporting a predetermined electronic mail protocol or protocols (col. 8, lines 7-17); and a remote access mail client (resides on communications device 100, Fig. 1) associated with the database and having access to the Internet Domain Name System (DNS) database and to a search engine associated with the protocol or protocols (col. 8, lines 7-17); in which system the remote access mail client is arranged to require from the user the user's electronic mail address and password (col. 7, line 63 – col. 8, line 17), to parse the mail address to identify and remove

the user identity from the mail address and thereby obtain a presumed domain name of the user's server (inherent to DNS look-up in order to locate the email server; col. 8, lines 7-17), to interrogate the access database to determine whether it contains a record of a server corresponding to the presumed domain name (inherent to DNS look-up in order to locate the email server; col. 8, lines 7-17), and to retrieve the record of any corresponding server thus identified as the server to which the user belongs (col. 8, lines 7-17), to retrieve the user's mail from any server identified as the user's server and to direct it to the user at the remote location (col. 8, lines 38-50).

For support of the inherency of parsing the email address to obtain a presumed domain name, interrogating the access database using the presumed domain name, and retrieving a record of the server as inherent to a DNS look-up, Applicant is referred to previously cited Stevens, pgs. 187-200. See also the Response to Arguments section below.

The Examiner notes that nothing in the claim precludes interpreting the access database as one of the DNS database(s) with which the remote access mail client is associated.

9. As for claims 9 and 18, Ho teaches the method according to claim 1 in which the predetermined protocol or protocols is or are the Post Office Protocol (POP3) and/or the Internet Message Access Protocol (IMAP) (col. 7, lines 54-62).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 2, 7, 8, 11, 16 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho in view of Smith et al. (US 6,138,122).
12. **Examiner's Note:** This does not constitute a new basis of rejection because Stevens was previously cited only to support the inherency of certain limitations to Ho, as explicitly stated in non-Final rejection mailed 6/4/04.
13. As for claims 2 and 11, Ho discloses the system of claims 1 and 10, in which the remote access mail client is arranged to assume that the presumed domain name is the user's server in the event that *a database* contains no corresponding record, to check the domain name for the user's mail and to identify the domain name as the user's server if the domain name response positively (col. 6, lines 24-48; col. 8, lines 7-17).

Ho does not specifically disclose querying an *access database* that is provided in addition to the inherent DNS database, as implied by the claims. Smith teaches querying an access database (e.g. computer access provider or local domain name server) provided in addition to the standard DNS database for the purpose of improving access speed (col. 1, lines 26-35). Moreover, Smith explicitly teaches that such a system may be used for sending and receiving email. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ho by providing an access database in addition to the inherent DNS database for the purpose of improving access speed, as taught by Smith above.

14. As for claims 7 and 16, Ho and Smith both teach the step of updating the access database with a record of a previously unrecorded server identified as the user's server or identified as supporting the predetermined protocol or protocols, because this step is inherent to the

function of DNS databases (and, thus, also inherent to the local domain name server of Smith) in order to maintain accurate routing tables. See Stevens pgs. 188-198.

15. As for claims 8 and 17, Ho does not specifically disclose dividing the database into first and second tables wherein the first table includes records of the user's mail addresses and the address of the corresponding servers. Smith teaches a local server having tables for speeding up address resolution for sending and receiving email (tables are inherent to the CAP when facilitating the sending/receiving of email; col. 1, lines 26-35). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ho by dividing the database into first and second tables wherein the first table includes records of user's mail addresses and the address of the corresponding servers and by entering records of domain names and addresses of any servers identified as corresponding servers in the second table in order to speed up address resolution, as taught by Smith above.

16. **Claims 3-6 and 12-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho in view of Smith and in further view of Stevens (W. Richard Stevens, "TCP/IP Illustrated, Vol. 1: The Protocols," Reading, MA, 1994.) (hereinafter Stevens).

17. As for claims 3 and 12, Ho and Smith do not explicitly disclose sending out a Mail Exchange MX record enquiry to the Internet Domain Name System. Stevens teaches:

sending out a Mail Exchange MX record enquiry to the Internet Domain Name (DNS) database regarding the presumed domain name (pgs. 450-451); listing the responses received from the DNS database (pgs. 450-451); checking the responses in turn to determine whether a predetermined port or ports associated with the predetermined protocol or protocols is or

are open or closed (pgs. 450-451); and identifying a response having an open port or ports as the user's server (pgs. 450-451).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ho and Smith by performing the above steps in order to receive email when the primary host is down, as taught by Stevens (pg. 450).

18. As for claims 4 and 13, Ho teaches interrogating the stored IP addresses with the user's address and password (Ho, col. 7, line 63 – col. 8, line 17). Ho and Smith do not explicitly disclose obtaining the Internet Provider (IP) address of the MX record. Stevens teaches:

obtaining the Internet Provider (IP) address of the MX record (pgs. 450-451); checking the open or closed status of the predetermined port or ports for a predetermined block of host IP addresses (pgs. 450-451); storing all of the IP addresses having open port status in the access database (pgs. 450-451); and identifying a successful IP address as the user's server (pgs. 450-451).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Ho and Smith by performing the above steps in order to receive email when the primary host is down, as taught by Stevens (pg. 450).

19. As for claims 5 and 14, Ho and Smith do not explicitly disclose performing a DNS zone transfer in the event that the user's server is not identified from amongst the responses from the DNS database. Stevens teaches:

requesting the full list of host names for the presumed domain name by DNS zone transfer (pg. 190; pgs. 450-451); checking the open or closed status of the predetermined



ports of the listed host names in turn (pgs. 450-451); and identifying a host having open port status as the user's server (pgs. 450-451).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ho and Smith by performing the steps above in order to efficiently locate the server, as taught Stevens (pgs. 187, 450).

20. As for claims 6 and 15, Ho teaches interrogating each of the stored IP address with the user's address and password and identifying a successful IP address as the user's server (col. 7, line 63 – col. 8, line 17). Ho and Smith do not *explicitly* disclose checking the open or closed status of the predetermined port or ports of the IP address in the retrieved block in the event that the DNS database does not allow zone transfer. Stevens teaches, in the event that the DNS database does not allow zone transfer:

retrieving the IP address block which has been allocated to the presumed domain by the Networked Information Centre (NIC) (NIC is inherent to any Server running on the Internet for the allocation of IP addresses; Stevens, pgs. 8, 187); checking the open or closed status of the predetermined port or ports of the IP addresses in the block (pgs. 450-451); storing all of the IP addresses having open port status in the access database (pgs. 450-451); and identifying a successful IP address as the user's server (pgs. 450-451).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ho and Smith by performing the steps above in order to efficiently locate the server, as taught Stevens (pgs. 187, 450).

***Response to Arguments***

**Drawings**

21. Objections to Fig. 1 are hereby withdrawn in view of Amendment.

**Specification**

22. The Examiner hereby withdraws the objections to the specification.

**112 Claim Rejections**

23. The rejection of claims 1-18 under 35 USC 112, second paragraph, is hereby withdrawn in view of Applicant's Remarks on page 10, which are found persuasive.

**102 Claim Rejections**

24. Applicant's arguments filed 9/7/04 with respect to the rejection of claims 1 and 10 under 35 USC 102(b) as anticipated by Ho have been fully considered but they are not persuasive.

On page 10 of the Remarks, Applicant has thoughtfully provided the Examiner with the example of remotely accessing email via an earthlink.net email account. In this example, the user is required to specify the precise domain of the mail server(s), presumably in order to setup POP3 or IMAP access via a program such as Microsoft Outlook. While the Examiner acknowledges that this is one manner of remotely accessing an email account known in the prior art, it is not the only one.

In fact, a quick visit to earthlink.net demonstrates this point. By following the link to webmail, the user is prompted to enter an email address and a password. *Nowhere* is the user required to specify the mail server(s). Rather, the system identifies the proper mail server on its own through a DNS query or the equivalent internal database look-up. As the Applicant himself has noted, the mail server(s) do not reside at the same physical location as

the primary log-in server for earthlink.net. Hotmail.com and yahoo.com are two websites (among numerous others) providing analogous access to remote email servers.

Ho discloses a system which is nearly equivalent to the above examples in that the user enters only an email address and a password. The user is not required to specify the mail server(s). Rather the mail server(s) are located through a DNS look-up, as noted in previously cited col. 8, lines 7-15. Contrary to Applicant's assertion, the Examiner does not take the position that Ho teaches the user specifying the mail server(s). This point was made only with respect to the 112, second paragraph, rejection, which has been withdrawn. The Examiner apologizes for any confusion over this point.

Applicant continues on page 12 by asserting that Ho does not properly anticipate the limitation of "parsing the mail address to identify and remove the user identifier from the mail address and thereby obtain a presumed domain name of the user's server." The Examiner respectfully disagrees and suggests that the Applicant may wish to review for himself col. 6, lines 24-56, of Ho as well as the workings of DNS servers generally. Specifically, as noted by Ho and Applicant (pg. 11), a typical email address takes the form of mailboxname@domainname, which may also be expressed as userid@domainname, for consistency with Applicant's claims. Thus, parsing the email address by removing the userid, as claimed, leaves only the domain name as the "presumed domain name" of the user's server. Ho performs in precisely this manner and *inherently* parses the email address in order to identify the domain name and access the mail server via a DNS query, as is clear from the discussions in col. 6, lines 24-56, and col. 7, line 63 – col. 8, lines 7-17. This inherent step is *required* in order for the invention of Ho to function as disclosed. Without

this step, it would be impossible to locate the server on which the user's mailbox resides, as would be apparent to one of ordinary skill in the art. Moreover, the step is inherent to use of the DNS system for locating a mail server on the Internet. For more information, the Applicant is referred to the background section of previously cited US 6,434,600 and Stevens, pgs. 187-198.

In particular, the Applicant is referred to pg. 190 of Stevens which describes the hierarchical structure of the DNS system and providing multiple servers within a given second level domain (or zone). As Applicant himself has pointed out on pg. 11 of the Remarks, the second level domain usually includes sub-domains which frequently reside on separate servers. Ho anticipates this fact by noting in col. 6, lines 38-44, that the domainname portion of the email address is used to identify either the domain or the machine (e.g. physical mail server) for the mailbox. Ho further discloses identifying the mail server using a DNS look-up (col. 8, lines 7-17). Thus, referring to Stevens as a reference for the inherent functions of the DNS system, it is clear that in order to retrieve an email message given only the second level domain name (e.g. earthlink.net), which is by default presumed to be the domain name of the mail server, a connection must first be made with a name server for that domain (e.g. earthlink.net). In order to obtain the IP address of the name server, the remote application would first query the nearest DNS database. Once the connection was established between the remote application and the name server, the name server would determine the correct address for the actual mail server within that domain (e.g. mail.earthlink.net).

The Examiner finds that Ho inherently includes *at least* a DNS database server, a name server, and a mail server, where the name server and the mail server may or may not reside on the same physical machine. Thus, under a first interpretation of the claims, the “access database” may be interpreted as the inherent DNS server of Ho.

For all of these reasons, claims 1 and 10 are properly rejected under 35 U.S.C. 102(b) as anticipated by Ho.

### 103 Claim Rejections

25. As demonstrated above, Ho properly anticipates the limitations of independent claims 1 and 10. In response to Applicant’s request, the rejections of claims 2-9 and 11-18 have been further detailed and clarified above (see *Claim Rejections - 35 USC § 103*), including the relevant motivation for combination.

With respect to the combination of Ho and Smith, Smith teaches adding an additional database server (computer access provider or local domain name server) locally within the domain (col. 1, lines 26-35). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ho by adding a local database for the purpose of facilitating domain name resolution and the sending and receiving of emails, as taught by Smith (col. 1, lines 26-35). Thus, under a second interpretation of the claims, the access database is also anticipated by the local domain name server of Smith.

With respect to claim 8, the email address is stored in the local server (access database) for the purpose of sending and receiving emails.

For all of these reasons, claims 2-9 and 11-18 are properly rejected under 35 USC 103(a).

***Conclusion***

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron C Perez-Daple whose telephone number is (571) 272-3974. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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 1/23/05

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